CITY OF SUGAR LAND

Engineering Department

CIP Project Number: TR0902

Title: Expansion of System Detection Network

Project Phase: Construction

% of Phase Completion

Design **Construction**

Cost for this Phase: $ 500,000

Funding Sources: Certificate of Obligation

Project Manager: David Worley

Contractor: Naztec ITS and TransCore

Consultant: TBD

Project Description:

As cited in the ITS 5-year Operations Plan, the existing detection network needs to be expanded to provide complete and accurate coverage of the major links in the City traffic signal network. This is will provide the necessary detection infrastructure to implement a traffic responsive signal system. The backbone for this infrastructure is to be provided via the on going HGAC CMAQ project for wireless infrastructure.

Justification: System detectors provide current traffic volume data on key arterials for implementation of traffic-responsive signal timing plans and real-time display of congestion levels to the motoring public on the traveler information website. To implement future adaptive traffic technology we need to add more detection capability. Per the ITS OP, adding more advanced and flexible detection is the BMP. This infrastructure will also provide data for the proposed dynamic message signs.

Updates: **December 2008-**Preparing a High-Tech RFP. Anticipate releasing the RFP early spring.

March 2009-High-Tech RFP was advertised and proposals were due March 12th.

June 2009 – Construction Contract is on Council Agenda for June 16th. Projected start date is August**.**

July 2009- City staff has agreed to delay notice to proceed until we get closer to the school year. This will allow us to develop accurate timing plans while school is in session.

August 2009- We performed a kickoff meeting and set schedule. Naztec began inventorying intersections.

September 2009- Naztec ITS started traffic volume counts on SH6 and inventorying Intersections.

October 2009 – Naztec ITS is continuing with traffic volume counts on 90A and inventorying intersections.

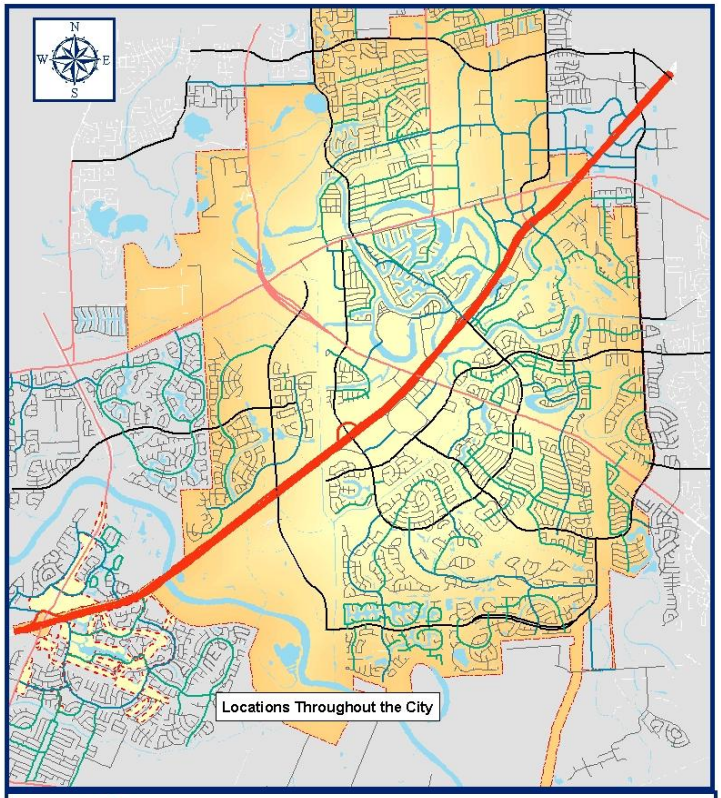
November 2009 – Naztec ITS is continuing with traffic volume counts on William Trace and inventorying intersections.

December 2009 – Reviewed subcontractor's deliverables with Naztec. Naztec is now reviewing current signal timings and continue to collect traffic volumes. Working on having a plan specific for our holiday travel demands in the future.

January 2010 – Naztec ITS has completed assembly of traffic and geometric data for modeling in Synchro for Sweetwater and Williams Trace. They received existing Synchro models and previous data collected from Klotz Associates for US 90A. They have conducted "Before" travel time runs using Tru-Traffic on State Highway 6 corridor. They continue preparation of redline drawings for the installation of the traffic detection system. This project is going to be delayed due to the delay in the Wireless Communications project and the SH6 traffic signal update.

February 2010 – Naztec ITS is redlining all intersection designs and continue to review data for the appropriate amount of signal plans need for each corridor. Work has slowed down until the Wireless project change order has been approved by TxDOT. Communications is a key to the success of this project.

March 2010 – Traffic Engineering met with Naztec to review all proposed signal timing plans and corridors to determine best location of cameras. Began work on scope for subs in the collection and development of synchro models for the corridors.



City of Sugar Land
Capital Improvement Program

TR0902
Expansion of System
Detection Network

GIS
City of Sugar Land
Geographic Information System